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Ministry of Energy and Natural Resources
Royal Government of Bhutan
Office of the Bhutan Power System Operator
Thimphu: Bhutan



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 25-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 24, 2025	9:00 AM			
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit-I	0.00	400kV THP - Siliguri Line - I	0.00	Unit-I under Shutdown. Unit-II on Standby. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	0.00	400kV THP - Siliguri Line - II	39.37	
		Unit- III	76.36	400kV THP - Siliguri Line- IV	34.94	
		Unit- IV	70.19	400kV THP - Malbase Line - III	237.33	
		Unit- V	74.48	400kV Malbase - Siliguri Line	-4.94	
		Unit- VI	89.62	-	-	
		Total	310.65	Auxiliary Consumption & Transformation Losses at Generator end	-0.32%	
2	4 x 180MW MHP	Unit-I	132.08	400kV MHP - Jigmeling Line - I	183.24	400kV MHP-JLG line- II & III on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	50.11	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	50.32	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	140.54	400kV MHP - Jigmeling Line - IV	183.91	
		-	-	132kV MHP - Yumoo Line - I	0.00	
		-	-	132kV MHP - Yumoo Line - II	61.73	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	213.82	
		-	-	400kV Jigmeling - Alipurduar Line - I	347.64	
		-	-	400kV Jigmeling - Alipurduar Line - II	346.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	-35.60	
		-	-	80MVA, 220/132kV ICT - II (HV)	-35.30	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	9.37	
		Total	373.05	Auxiliary Consumption & Transformation Losses at Generator end	-0.06%	
3	6 x 170MW PHP-II	Unit- I	179.54	400kV PHP II - Jigmeling -I	272.00	erstwhile interim lines
		Unit- II	185.28	400kV PHP II - Jigmeling -II	272.00	
		Unit- III	185.31	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	550.13	Auxiliary Consumption & Transformation Losses at Generator end	1.11%	
4	4 x 84MW CHP	Unit- I	57.74	220kV CHP - Birpara Line - I	-30.63	Unit-IV under Shutdown.
		Unit- II	58.58	220kV CHP - Birpara Line - II	-30.61	
		Unit- III	58.96	220kV CHP - Gedu	57.05	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	57.88	
		-	-	220kV CHP - Jamjee - II (new)	57.43	
		-	-	220kV CHP - Jamjee - III (new)	55.70	
		-	-	220kV Malbase - Birpara Line	-52.76	
		-	-	66kV CHP - Gedu Line	7.03	
		-	-	3x3MVA, 66/11kV TFR	1.28	
		Total	175.28	Auxiliary Consumption & Transformation Losses at Generator end	0.09%	
5	2 x 12MW BHP (U/S)	Unit- I	6.96	220kV BHP - Semtokha Line	138.76	
		Unit- II	7.88	66kV BHP - Lobeyza Line	26.98	
		Total	14.84	220kV BHP - Tsirang Line	-125.26	
6	2 x 20MW BHP (L/S)	Unit- I	13.01	5MVA, 66/11kV TFR	0.45	
		Unit- II	12.53	30MVA ICT, 220/66kV (HV)	13.08	
		Total	25.54	Auxiliary Consumption & Transformation Losses at Generator end	-1.36%	
7	2 x 63MW DHP	Unit-I	34.33	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby. DHP Unit II on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	34.20	
		-	-	220kV Jigmeling - Dagapela Line	52.03	
		-	-	5MVA, 220/33kV TFR	0.12	
		Total	34.33	Auxiliary Consumption & Transformation Losses at Generator end	0.03%	
8	4 x 15MW KHP	Unit- I	16.46	132kV KHP - Nangkhori Line	43.39	
		Unit-II	16.57	132kV KHP - Kilikhar Line	22.09	
		Unit- III	16.62	5MVA, 132/11kV TFR	0.26	
		Unit- IV	16.59	132kV Motanga - Rangia Line	24.82	
		Total	66.24	Auxiliary Consumption & Transformation Losses at Generator end	0.75%	
9	2 x 59MW NHP	Unit-I	56.02	132kV NHP-MHP-I	0.00	Unit-II tripped @ 07:51hrs & is under inspection. 132kV NHP-MHP line-I on Standby.
		Unit-II	0.00	132kV NHP-MHP-II	55.60	
		Total	56.02	Auxiliary Consumption & Transformation Losses at Generator end	0.75%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system. SHP Unit-I & II tripped on 23/05/2025 at 21:50hrs and are under inspection.
		Unit- II	0.00	-	-	
		Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	

Note: Generation-Load Summary (MW) for 24-May-25 at 09:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,606.08	921.97	684.11

Note: Generation-Load Summary (MW) for 24-May-24 at 09:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	922.40	867.19	55.21

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 25-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 24, 2025	19:00:00			25-Dec-2024	18:36
						1026.44
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	0.00	400kV THP - Siliguri Line - I	0.00	Unit-I under Shutdown. Unit- II on Standby. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	0.00	400kV THP - Siliguri Line - II	36.94	
		Unit- III	138.85	400kV THP - Siliguri Line - IV	32.87	
		Unit- IV	91.99	400kV THP - Malbase Line - III	261.23	
		Unit- V	10.54	400kV Malbase - Siliguri Line	-13.83	
		Unit- VI	89.78	-	-	
		Total	331.16	Auxiliary Consumption & Transformation Losses at Generator end	0.04%	
2	4 x 180MW MHP	Unit-I	189.76	400kV MHP - Jigmeling Line - I	238.47	Unit III taken for emergency Shutdown @09:41hrs 400kV MHP-JLG line-II & III on Standby. 132kV MHP_Yurmoo Line-I not in Service.
		Unit-II	82.13	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	190.27	400kV MHP - Jigmeling Line - IV	239.36	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.82	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	232.00	
		-	-	400kV Jigmeling - Alipurduar Line - I	307.64	
		-	-	400kV Jigmeling - Alipurduar Line - II	306.18	
		-	-	80MVA, 220/132kV ICT - I (HV)	-41.53	
		-	-	80MVA, 220/132kV ICT - II (HV)	-41.13	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	6.07	
		Total	462.16	Auxiliary Consumption & Transformation Losses at Generator end	0.18%	
3	6 x 170MW PHP-II	Unit- I	186.30	400kV PHP II - Jigmeling -I	372.20	400kV PHP II - Jigmeling Line II tripped & Unit-III tripped @ 15:48hrs
		Unit- II	186.80	400kV PHP II - Jigmeling -II	0.00	
		Unit- III	0.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	373.10	Auxiliary Consumption & Transformation Losses at Generator end	0.24%	
4	4 x 84MW CHP	Unit- I	64.67	220kV CHP - Birpara Line - I	-29.44	Unit- IV under Shutdown.
		Unit- II	60.50	220kV CHP - Birpara Line - II	-29.25	
		Unit- III	64.89	220kV CHP - Gedu	44.13	
		Unit- IV	0.00	220kV CHP - Jamjee - I	66.32	
		-	-	220kV CHP - Jamjee - II	65.84	
		-	-	220kV CHP - Jamjee - III	63.43	
		-	-	220kV Malbase - Birpara Line	-39.99	
		-	-	66kV CHP - Gedu Line	8.24	
		-	-	3x3MVA, 66/11kV TFR	1.42	
		Total	190.06	Auxiliary Consumption & Transformation Losses at Generator end	-0.33%	
5	2 x 12MW BHP (U/S)	Unit- I	5.81	220kV BHP - Semtokha Line	131.20	
		Unit- II	7.27	66kV BHP - Lobeysa Line	27.50	
		Total	13.08	220kV BHP - Tsirang Line	-124.76	
6	2 x 20MW BHP (L/S)	Unit- I	10.94	5MVA, 66/11kV TFR	0.56	
		Unit- II	10.54	30MVA ICT, 220/66kV (HV)	15.96	
		Total	21.48	Auxiliary Consumption & Transformation Losses at Generator end	0.17%	
7	2 x 63MW DHP	Unit-I	30.47	220kV DHP - Tsirang Line	0.00	220kV DHP-TSI line on Standby. Unit-II on standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	30.20	
		-	-	220kV Jigmeling - Dagapela Line	18.20	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	30.47	Auxiliary Consumption & Transformation Losses at Generator end	0.23%	
8	4 x 15MW KHP	Unit- I	16.56	132kV KHP - Nangkhori Line	41.68	
		Unit-II	16.52	132kV KHP - Kilikhar Line	23.41	
		Unit- III	16.60	5MVA, 132/11kV TFR	0.34	
		Unit- IV	16.52	132kV Motanga - Rangia Line	34.32	
		Total	66.20	Auxiliary Consumption & Transformation Losses at Generator end	1.16%	
9	2 x 59MW NHP	Unit-I	40.03	132kV NHP-MHP-I	39.67	
		Unit-II	40.07	132kV NHP-MHP-II	39.66	
		Total	80.10	Auxiliary Consumption & Transformation Losses at Generator end	0.96%	
10	2 x 9MW SHP	Unit- I	4.50	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.50	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 24-May-2025 at 19:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,576.81	965.30	611.51

Note: Generation-Load Summary (MW) for 24-May-2024, at 19:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	991.33	883.39	107.94

Note: Daily Energy (MUs) and Power(MW) Statistics for 24-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	41.47	22.06	0.00	19.40	1,030.54

- The Instantaneous load balance,calculated as (Total generation - (Total export-Import) - Total domestic load), do not tend towards zero. This could be due to the following reasons:
 - Not all the meters are digital and now are all the meter at all locations can be read at same time (say 9:00hrs) due to many meter to be read manually. ii) The clocks of all the locations are not synchronized.
- This report, compiled using the SCADA data, is prepared to give an overall idea of the generation & load flow for the system at a particular instant. This report also gives energy and import/export figures.
- When SCADA data are unavailable for certain stations due to technical issues, required data are collected from the site.